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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/123,123	07/27/1998	KOICHIRO WATANABE	SONY-P8776	5183
22850	7590	01/15/2004		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER GRIER, LAURA A	
			ART UNIT 2644	PAPER NUMBER 13

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/123,123

Applicant(s)

WATANABE, KOICHIRO

Examiner

Laura A Grier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 1-19,23,25,26 and 29-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-22,24,27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The indicated allowability of claims 23 and 25 (now cancelled) is withdrawn in view of the newly discovered reference(s) to Kloker et al, U. S. Patent No. 5214705. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 20 (dependent claims 21-22), and 24 (dependents 27 and 28)** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **claim 20**, line 12, on page 14 of paper no. 12, recites, "... audio control signal reception apparatus." It unclear to the examiner how the controlled apparatus, which is the reception apparatus outputs it's own control signal, which controls the reception apparatus. Thus, the claim language is indefinite.

Regarding **claim 24**, lines 8-9, on page 14 of paper no. 15, recites, "... an audio signal ...". The claim language makes the claim interpretation unclear to the examiner as to whether more than one audio signal is being transmitted with the audio control signal, an audio signal (meaning one) has already been claim ed in line 4. Thus, the claim language is indefinite.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 20-21, 24 and 28** are rejected under 35 U.S.C. 102(b) as being anticipated by McGirr et al., U S. Patent No. 5129098.

Regarding **claim 20**, McGirr et al. (herein, McGirr) discloses a radio telephone comprising a transmitter with a signal processor for processing audio signals and control signals for transmission (figure 1, col. 3, lines 64-68 and col. 4, lines 1-5), which reads on an audio control transmission apparatus; the radio telephone comprising a receiver for receiving the audio control information and audio signal reads on the apparatus to be controlled and inherently a control instruction is given based on the audio control signal as evident by the fact that a CPU provides the control signal which is processed with the audio signal to provide a combined signal and wherein the CPU control the functions of the transmitter and receiver, therein (col. 3, 64-68 and col. 4, lines 35-40).

Regarding **claim 21**, McGirr discloses everything claimed as applied above (see claim 20). McGirr discloses the CPU, which supports a control instruction input means and audio control signal generating means and the transmitter with the radio telephone itself functions as the signal output means.

Regarding **claim 22**, McGirr discloses everything claimed as applied above (see claim 20). McGirr discloses the signal input means as the receiver of the radio telephone, which

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comprises a signal processor wherein the transmitted baseband signal is separated into audio signals and controls signals, which indicates extracting the audio control signal from the audio signal, wherein the execution of audio control is inherently executed as evident by the fact that a CPU provides the control signal which is processed with the audio signal to provide a combined signal and wherein the CPU control the functions of the transmitter and receiver (col. 3, 64-68 and col. 4, lines 35-40).

6. **Claims 20 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al., U. S. Patent No. 5203020.

Regarding **claim 20**, Sato et al. (herein, Sato) discloses radio communication apparatus which comprises radio signals transmitted via a base station, wherein the radio signal includes audible sound signals and control signals; which reads on an audio control signal transmission apparatus; the portable unit includes audio control unit that includes an audio unit and a control unit, reads on the apparatus to be controlled via CPU (or audio controller) within the audio unit for control the operations of the audio control unit (col. 3, lines 46-55, col. 4, lines 46-66, and col. 5, lines 1-45 and figures 1 and 2), and a sound wave is output via a loudspeaker.

Regarding **claim 24**, Sato discloses radio communication apparatus which comprises radio signals transmitted via a base station, wherein the radio signal includes audible sound signals and control signals; which reads on an audio control signal transmission apparatus; the portable unit includes audio control unit that includes an audio unit and a control unit, reads on the apparatus to be controlled via CPU within the audio unit for control the operations of the audio control unit (col. 3, lines 46-55, col. 4, lines 46-68, and col. 5, lines 1-45, and figures 1 and

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2), and further the audio circuit of the portable unit extract the audio control signal from the audio signal, and as well, the oscillator/frequency divider constitutes transmission of the audio signal and audio control signal via time division.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 24, 27-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGirr in view of Kloker et al.

Regarding **claim 24**, McGirr et al. (herein, McGirr) discloses a radio telephone comprising a transmitter with a signal processor for processing audio signals and control signals for transmission (figure 1, col. 3, lines 64-68 and col. 4, lines 1-5), which reads on an audio control transmission apparatus; the radio telephone comprising a receiver for receiving the audio control information and audio signal reads on the apparatus to be controlled and the receiver of the radio telephone, which comprises a signal processor wherein the transmitted baseband signal is separated into audio signals and controls signals, which indicates extracting the audio control signal from the audio signal, and inherently a control instruction is given based on the audio control signal as evident by the fact that a CPU provides the control signal which is processed with the audio signal to provide a combined signal and wherein the CPU control the functions of the transmitter and receiver (col. 3, 64-68 and col. 4, lines 35-40). However,

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McGirr fails to specifically disclose the audio signal and audio control signal being transmitted are switched between each other in by time division (herein, time division audio transmission).

Regarding the time division audio transmission, in a similar field of endeavor, Kloker discloses a circuit and method for communicating digital audio information. Kloker's disclosure comprises the transmission of digital audio data and digital audio control information, which are transmitted in a serial format to an interface via time slots (col. 5, lines 32-68 and col. 6, lines 1-4), which reads on a time division audio transmission.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of McGirr by incorporating time division audio transmission (time division technique) for the purpose of providing efficient transmitting and processing/formatting of two audio components/signals for adequate transmission, wherein time division technique is a commonly used in the art.

Regarding **claims 27 and 28**, McGirr and Kloker disclose everything claimed as applied above (see claim 24). McGirr discloses audio signal and audio control signal as being a basedband signal which is transmitted as a RF carrier signal, which indicates the transmission as a radio wave and/or transmission path (col. 4, line 6-9).

Response to Arguments

9. The applicant's remarks were directed towards the amended changes of the amendment to correct informalities of the specification as previously indicated in the last office action; and the amended changes of the incorporated objected subject matter in the independent claims. The

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corrections of the informalities are accepted. And, new prior art along with the previous prior art has been used in the rejection of the pending claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG

January 6, 2004

MINSUN OH HARVEY
PRIMARY EXAMINER